



City of Santa Barbara
Airport Department

Memorandum

DATE: March 17, 2010
TO: Airport Commission
FROM: Karen Ramsdell, Airport Director
SUBJECT: 2009 Integrated Pest Management Annual Report

Recommendation:

That Airport Commission recommend that City Council accept the City of Santa Barbara, Integrated Pest Management Strategy, 2009 Annual Report, dated February 2010.

Background:

The City of Santa Barbara adopted an Integrated Pest Management (IPM) strategy in January 2004 to reduce the amount and toxicity of pesticides used by the City and, where feasible, to eliminate pesticide use in public areas using alternative methods. This report highlights only Airport portions of the attached 2009 IPM Annual Report.

In early 2006, the City adopted the Pesticide Hazard and Exposure Reduction (PHAER) Zone model. In that model areas of the Airport were mapped based on potential human and environmental pesticide hazard and exposure risk, as green, yellow or special circumstance (red) zones. Accordingly pest control products were evaluated on a range of human and environmental toxicity measures and rated as green, yellow or special circumstance (red). On a continuum, green products have low human and environmental toxicity, while there is high concern over the human and/or environmental toxicity traits associated with special circumstance (red) products. The model informs an applicator of the appropriate type of product to use in a specific area of the City.

Alternatives Used:

- Alternative efforts focused on the control of weeds through mechanical methods, including string trimming, hand weeding and hoeing. The number of hours devoted to alternative pest control methods remained very high at 14,024 hours recorded in 2009. Airport was responsible for over 70% of the alternative effort hours recorded citywide.
- Applied 9.91 gallons of Burnout II, a green herbicide, in 2009 to help control weeds in PHAER green zones.
- Gophers outside the airfield fence were controlled with mechanical steel traps.
- Drywood termites were discovered in an office inside the Airline Terminal. The drywood termites there were eradicated in December by a local contractor using heat.
- Applied 30 yards of mulch to suppress weed growth.

- Airport staff worked to improve its herbicide application skills in an effort to improve herbicide efficacy. Staff improved application techniques and are now adjusting water chemistry to maximize the effectiveness of liquid herbicides.

Airport Department Pesticide Use:

Airport pesticide applications concentrated on four types of pests in 2009: mosquitoes, rodents, weeds and termites. Airport elected to apply red materials to control gophers on the airfield and drywood termites in two buildings. Red materials were selected by Airport staff, and exemption requests approved by the IPM Advisory Committee, because those materials were the most appropriate approach to control the problem pests.

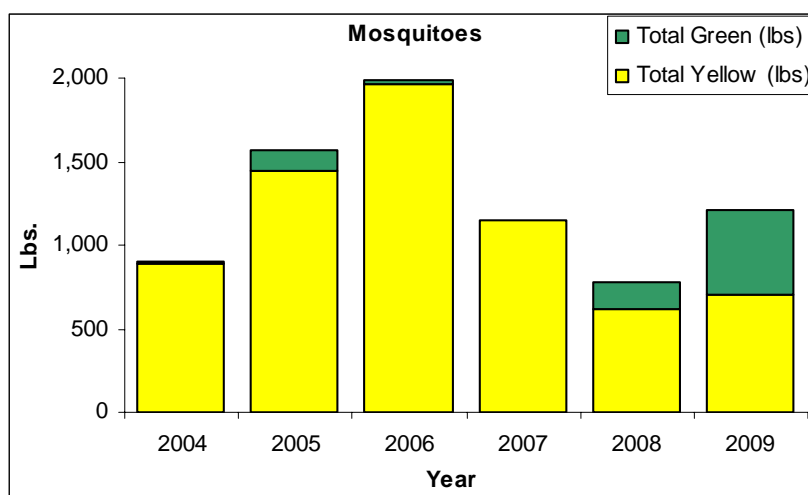
Exemptions

Two exemptions were approved for Airport in 2009 - Fumitoxin and Roundup Promax. A one year exemption for Vikane was approved at the end of 2008. All were used in 2009.

Mosquitoes

Airport relies primarily on Altosid XR, a yellow extended release larvicide to control mosquito sources in the Goleta Slough. The product is effective for up to 180 days. In wet years, a second application of Altosid XR is needed due to storm water remaining in large basins, creating mosquito sources beyond the effectiveness of the product. In 2009, generally dry conditions limited the need for reapplication of Altosid XR. Airport has worked with the Mosquito and Vector Management District to rely more heavily on the green, BTI based product Vectobac G to control smaller residual mosquito sources in the short term, in lieu of second applications of Altosid XR. BTI based products are only effective for about 10 days.

In 2009 the Mosquito and Vector Management District applied 699.52 lbs of Altosid XR and Altosid Pellets and 507 lbs of Vectobac G, on the Airport's behalf, to control mosquito sources in and around the Goleta Slough.

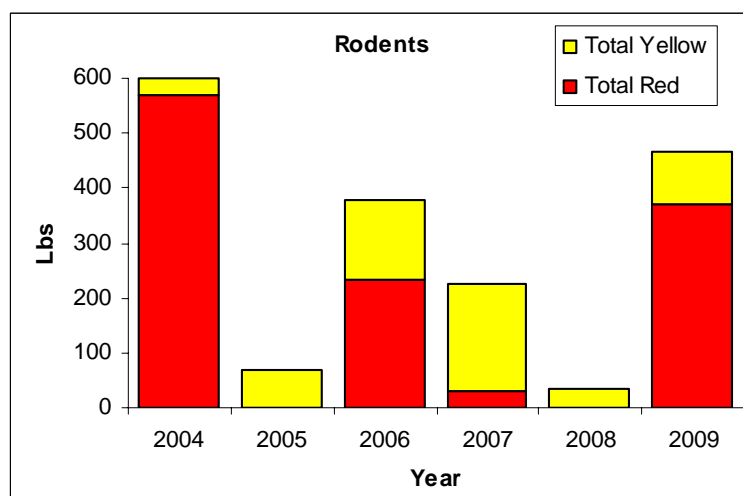


Rodents

Following several years of no significant application of rodenticides on the airfield, Airport made a concerted effort to reduce airfield rodent populations. Rodents on the airfield attract predators that pose a collision hazard for aircraft. Rodents also create an FAA compliance issue by undermining and creating uneven surfaces in runway safety areas. The Airport is required by FAA to maintain safety areas in a smooth, compact condition. On-going rodent control is necessary to maintain a safe environment for aircraft operations.

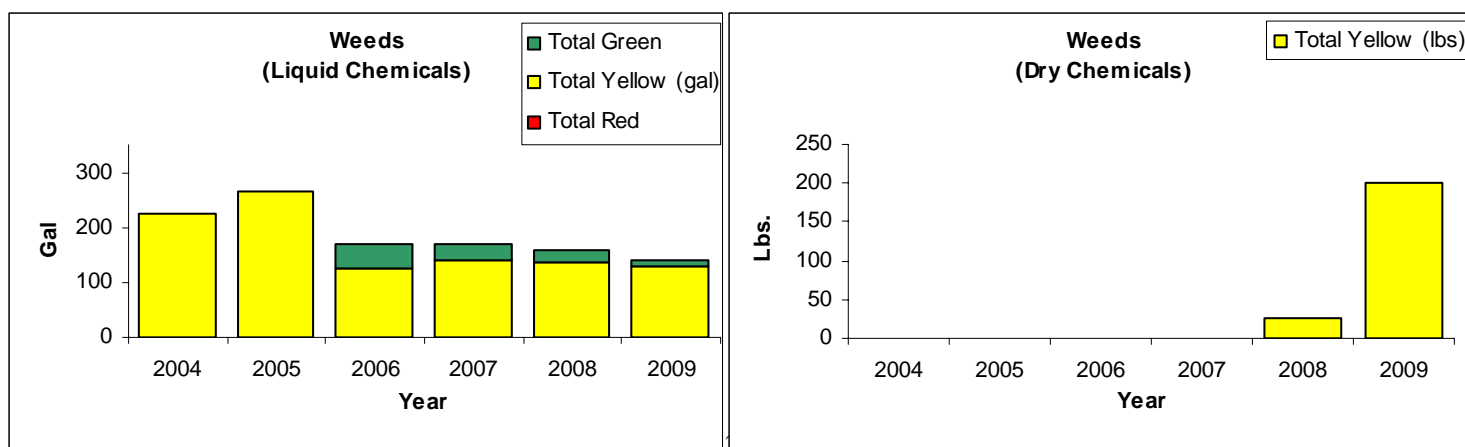
In 2009, Airport applied 370.6 lbs of Fumitoxin, a red material to control gophers on the Airfield. Much of the material was used for treatment of new airfield areas that resulted from the recent relocation of Runway 7/25 and creation of Taxiway M.

Airport also used 38.88 lbs of Ditrac and 55 lbs of Wilco, both yellow diphacinone based baits to control ground squirrels and other rodents at the Airport.



Weeds

In addition to the extensive manual weed control program at the Airport, staff used the yellow products Roundup Pro, Roundup ProMax, Surflan, XL2G and Aquamaster to maintain the airfield as needed for safe aircraft operations and to preserve infrastructure. Herbicides were used to prevent weeds from obscuring airfield lights and signs, and to prevent weeds from deteriorating airfield assets.



Some hand weed abatement was conducted on the airfield in 2009, however this effort is limited due to safety considerations for maintenance personnel.

Outside the airfield fence Burnout II (green material) was used occasionally to help control weeds in PHAER green zones. A small amount of yellow materials were used, consistent with PHAER designations, on the Hollister Avenue traffic islands.

For 2009, Airport applied the following herbicides:

- 9.91 gallons of Burnout II (green liquid)
- 73 gallons of Roundup Pro (yellow liquid)
- 25 gallons of Roundup Promax (yellow liquid)
- 30 gallons of Surflan (yellow liquid)
- 2.02 gallons of Aquamaster (yellow liquid)
- 200 lbs of XL2G (yellow dry)

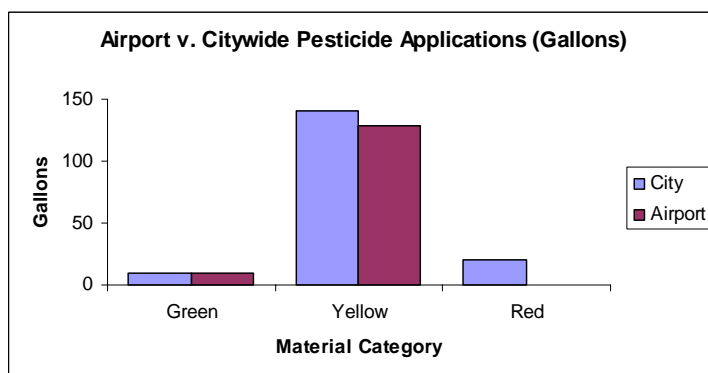
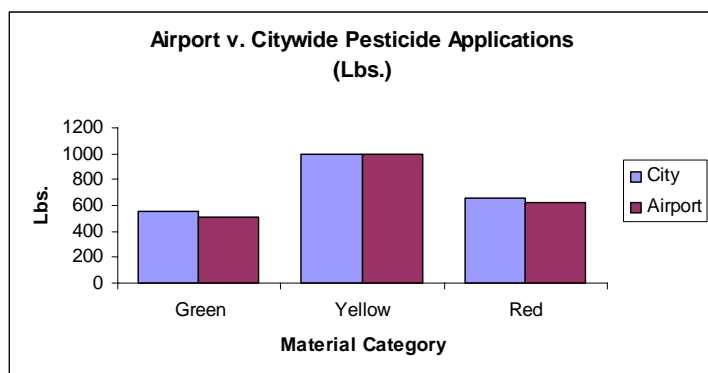
Termites

In 2009 Airport tented two buildings with Vikane to prevent damage from drywood termites. The IPM Advisory Committee approved an exemption for the use of Vikane, a red material. During the initial tenting process 201 lbs of Vikane were used to treat the two buildings. The initial treatment of one building was unsuccessful and the contractor re-tented the building under warranty, resulting in the application of an additional 52 lbs of Vikane.

Citywide IPM Effort Totals:

To minimize direct and indirect human health and safety hazards posed by pests at the Airport, the Department is the major user of pesticides in the city . Airport Department used 81% of all liquid pesticides and 97% of all dry pesticides applied by the City in 2009, but also contributed over 70% of the alternative effort hours that were recorded citywide.

Mosquito control efforts in the Goleta Slough that help prevent the spread of West Nile Virus account for over 50% of the pesticide units applied by the city. Other major Airport pesticide applications needed to comply with FAA regulations and maintain a safe airfield, such as weed and rodent control, account for an additional 32% of the units applied citywide.



2010 Strategy Changes:

Airport experienced limited success with use of XL2G in controlling weeds on the airfield that are known to resist control with Surflan or Roundup. In 2010 Airport will use XL2G primarily as a pre-emergent in rocked parkways.

The Airport landscape maintenance contractor, Paysage, Inc. has identified specific initiatives for 2010 to further improve the effectiveness of its IPM efforts in Airport green zones. Efforts will focus on plant health, conservation of water resources and recycling of green waste. The contractor has also committed to have 2 staff certified as green gardeners during the coming fiscal year.

Roundup Promax was added as an approved material in 2009. Airport has experienced positive results from use of the product, combined with improved staff pesticide application skills. Airport will continue using Roundup Promax in 2010 as its primary tool in controlling weeds on the airfield that may impeded visibility of lights and signs, or threaten airfield infrastructure.